

Application No. 10/262,612  
Reply dated July 7, 2005  
Response to Office Action dated April 7, 2005

### REMARKS

The Examiner is respectfully requested to acknowledge the claim of priority previously submitted under 35 U.S.C. § 119 in application no. 10/262,612. The present application is a divisional of the '612 application and the prior claim of priority was identified in the Request for Filing of the present application.

The restriction requirement in this case is again traversed. The Office Action asserts that claims 13-17 (Group II) are hybrid claims which should be treated as if they were "product-by-process" claims (see page 2). The Office Action is correct that the claims of Group II are directed to process of use claims that depend from product claims. These claims are nothing like product-by-process claims, however, and should not be treated as if they were such claims. The claims of Group II merely recite a method and the method requires the use of a particular compound. Product-by-process claims, on the other hand, are claims that recite a product produced by a particular method. The method claims in Group II are not directed to producing a product, rather, they are directed toward a method of chemically treating a component.

The Office Action makes the conclusory statement that process of use claims depending on product claims are hybrid claims and should be treated similarly to "product-by-process" claims. The Office Action provides no support for this conclusion, and the conclusion is not supported by the MPEP or the Patent laws generally. The claims of Group I and Group II stand in the relationship of a product and process of using that product. MPEP § 806.05(h), governs such claims and this

Application No. 10/262,612  
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section of the MPEP makes no mention of either "hybrid" claims or "product-by-process" claims.

MPEP § 806.05(h) explains that:

A product and a process of using the product can be shown to be distinct inventions if either or both of the following can be shown: (A) the process of using as claimed can be practiced with another materially different product; or (B) the product as claimed can be used in a materially different process.

The burden is on the examiner to provide an example, but the example need not be documented.

The present record includes no example that would satisfy condition (A) or (B). The Office Action asserts that "even though the claims of Group II require the product of Group I, Group II still can be properly restricted from Group I if Group II can be practiced with a materially different product other than the product of Group I." This statement is incorrect and cannot be properly supported. The compounds required in the method claims of Group II are defined by the claims of Group I and this is why the claims of Group II cannot be practiced without also practicing the claims of Group I. Because the claims of Group II require the product of Group I, Group II must always be practiced with the product of Group I and the claims of Group II cannot be practiced with any materially different product. To state otherwise ignores language in each of the claims of Group II that makes them dependent from Group I.

The most recent Office Action provides no new example to try to satisfy condition (A) or (B). The attempt to satisfy condition (A) by the example offered in the Office Action of October 5, 2004, is improper, because it ignores the requirement

Application No. 10/262,612  
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that the methods of Group II employ the compounds of Group I. Accordingly, the present record includes no satisfactory example that would satisfy condition (A) or (B) of § 806.05(h) and absent such an example, the restriction requirement cannot be properly maintained. Reconsideration and withdrawal of the restriction requirement are respectfully requested.

The rejection of claims 8-11 under 35 U.S.C. § 103(a) as obvious over WO 99/48641 or Lauzon et al. (U.S. Patent No. 6,105,850) in view of Popoola et al. (U.S. Patent No. 5,723,187) is respectfully traversed.

Claim 8 recites a fine alkali metal fluorozincate with a grain spectrum in which 50% of the particles have a diameter of  $< 5 \mu\text{m}$ . Claim 9 specifies the alkali metal of claim 8 as potassium and claim 10 limits the potassium fluorozincate of claim 9 to a grain spectrum in which 50% of the particles have a diameter of  $< 3.8 \mu\text{m}$ . Claim 11 is a separate claim that requires a fluorozincate with a grain spectrum in which 50% of the particles have a diameter of  $< 11 \mu\text{m}$ .

The Office Action asserts that WO '641 teaches an alkali (potassium) fluorozincate as a fluxing agent and that Lauzon teaches a potassium fluorozincate as a fluxing agent. The Office Action concedes, however, that neither WO '641 nor Lauzon teaches a particle size for metal fluorozincates (see page 4). Although Popoola teaches a thermal spray coating using potassium aluminum fluorides with a particle size under  $10 \mu\text{m}$  (see col. 3, in particular, lines 32-41), the reference provides no teaching relevant to the claimed fluorozincates. It cannot simply be assumed that a person of skill in the art would think that the flux particle sizes for potassium aluminum fluorides disclosed by Popoola would be at all useful or desirable for fluxes generally, much less for alkali metal fluorozincates.

Application No. 10/262,612  
Reply dated July 7, 2005  
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In particular, Popoola teaches the deposition of potassium aluminum fluorides onto a metal surface to provide a dry flux coated surface, upon which a metallic coating can be sprayed (see col. 2, lines 6-18). Popoola does not teach or suggest that the claimed alkali metal fluorozincates would be usable, how they might be formed, or how the grain spectrum might be influenced.

A proper obviousness rejection requires a suggestion or motivation to combine the references. MPEP § 706.02(j) (Eighth Edition, Revision 2, May 2004). Absent some teaching, suggestion or incentive to combine the references, obviousness cannot be established. *In re Geiger*, 815 F.2d 686, 688, 2 USPQ 2d 1276, 1278 (Fed. Cir. 1987).

A person of skill in the art would have no reason to think that the teachings of Popoola for potassium aluminum fluorides, which are preferably in the form of a double fluoride salt, namely  $K_3AlF_6 + KAlF_4$ , might be relevant to the teachings of either WO '641 or Lauzon for alkali fluorozincates. The record provides no indication of why a person of skill in the art might be inclined to think that teachings relevant to potassium aluminum fluorides are relevant to alkali fluorozincates. Accordingly, a person of skill in the art would not try to apply the particle sizes taught in Popoola on the fluxes of WO '641 or Lauzon.

Absent a suggestion or motivation to combine the reference, the obviousness rejection cannot be properly maintained.

The rejection of claim 12 under 35 U.S.C. § 103(a) as obvious over WO '641 or Lauzon in view of Shimajiri et al. (U.S. Patent No. 4,989,775) is respectfully traversed.

Application No. 10/262,612  
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Claim 12 recites a fine alkali metal fluorozincate with a grain spectrum in which 50% of the particles have a diameter of  $> 11 \mu\text{m}$ . As indicated above and in the Office Action, neither WO '641 nor Lauzon teaches a particle size for metal fluorozincates.

Shimarjiri teaches a method for brazing aluminum components with a flux through two separate methods: the flux suspending method and the electro-static flux depositing method (col. 2, lines 44-56). Shimarjiri does not name fluorozincates as suitable for either of the two brazing methods. The reference suggests  $\text{KAlF}_4$  or mixtures of  $\text{KAlF}_4$  and  $\text{KF}$  and makes no mention of fluorozincates. None of the references provides any indication that the fluxes of Shimarjiri behave the same those of WO '641 or Lauzon. Accordingly, one of skill in the art would have no motivation to try to combine these references.

Both of the rejections under 35 U.S.C. § 103 require one of skill in the art to assume that teachings relevant to a particular flux would be generally applicable to another flux regardless of its composition and manufacture. The reality is that one of skill in the art would have no reason to believe that the particle sizes taught by Shimarjiri and Popoola would be generally applicable to all fluxes, regardless of their composition and manufacture. Without at least some indication that the particle sizes taught by Shimarjiri and Popoola would be generally applicable to the alkali metal fluorozincate's of WO '641 or Lauzon, there is no motivation to try to combine the teachings of the references so as to arrive at the proposed combinations. Accordingly, the present record reflects no suggestion or motivation for a person of skill in the art to try to combine the teachings of the references in the proposed combinations. Reconsideration and withdrawal of these rejections is respectfully requested in view of the foregoing comments.

Application No. 10/262,612  
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### CONCLUSION

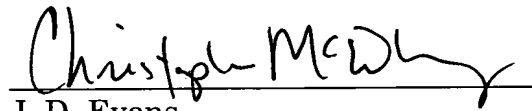
In view of the foregoing, the application is respectfully submitted to be in condition for allowance, and prompt favorable action thereon is earnestly solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #037110.51540D1).

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Respectfully submitted,



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